

BRAUERIA (Lunz am See, Austria) 35:25-27 (2008)

**Trichoptera from Chang island, southeastern Thailand, with the description of three new species**

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**Introduction**

Chang island (Koh Chang) is the second largest island of Thailand, located on the Thai east coast 310 km away from Bangkok near the border to Cambodia in the Gulf of Thailand. Koh Chang the largest among the 52 islands of Trat Province, covering an area of 425 square km, about 30 km long and 14 km wide. The interior of the island is mountainous and covered with tropical rainforest. The highest elevation is Khao Salak Phet, which is 743 m above sea level. More than 900 species of caddisflies are known from Thailand. However data on the Trichoptera of eastern Thailand are very limited. The material described here was collected in Chang island in February 2007. All holotypes are deposited in the Zoological Institute of the Russian Academy of Sciences, St Petersburg, Russia, some of the paratypes are deposited in the collection of the second author.

**Locality 1:**

Thailand, Trat Province, Chang island, river Khlong Plu, over the Khlong Plu Waterfall, h=126 m, 12°03'56.74''N, 102°18'51.30''E, at UV light trap, 21 February 2007, leg. Melnitsky.

**Locality 2:**

Thailand, Trat Province, Chang island, river Khlong Plu, downstream from Khlong Plu Waterfall, h=95 m, 12°03'46.42''N, 102°18'43.69''E, at UV light trap, 16 February 2007, leg. Melnitsky.

**Locality 3:**

Thailand, Trat Province, Chang island, river Khlong Chab, downstream from Python Waterfall, h=192 m, 12°06'22.07''N, 102°17'56.27''E, at UV light trap, 19 and 23 February 2007, leg. Melnitsky.

**Locality 4:**

Thailand, Trat Province, Chang island, river Prao Thalay Waterfall, h= m, 11°59'05.21''N, 102°19'34.37''E, 18 February 2007, leg. Melnitsky.

**List of material**

**Rhyacophilidae**

*Rhyacophila inaequalis* DENNING & SCHMID, 1971  
Material: 4 males, Loc. 1.

*Rhyacophila* sp.

Material: 1 pupa (female), Loc. 3, 19.02.2007.

**Glossosomatidae**

*Glossosoma* sp.

Material: 6 larvae, 1 pupa (female)

**Hydroptilidae**

*Chrysotrichia vulcanus* MALICKY & CHANTARAMONGKOL, 2007

Material: 15 males, Loc. 2; 2 males, Loc. 1.

Southernmost point of distribution.

*Hellyethira tros* MALICKY & CHANTARAMONGKOL, 2007

Material: 1 male, Loc. 1.

Southernmost point of distribution.

*Orthotrichia biokrotta* sp. n.

Material: Holotype male, Loc. 1; Paratype: 2 males, Loc. 2.

*Oxyethira bogambara* SCHMID, 1958

Material: 1 male, Loc. 1; 17 males, Loc. 2.

*Ugandatrichia kerdmuang* MALICKY & CHANTARAMONGKOL, 1991

Material: 1 female, Loc.2

**Philopotamidae**

*Chimarra pipake* MALICKY & CHANTARAMONGKOL, 1993

Material: 9 males and 11 females, Loc. 1.

*Chimarra okuihorum* MEY, 1998

Material: 65 males and 1 female, Loc. 1.

*Chimarra* sp.

Material: 4 larvae, Loc. 4.

**Stenopsychidae**

*Stenopsyche siamensis* MARTYNOV, 1931

Material: 12 pupae, 12 larvae, Loc.1.

**Polycentropodidae**

*Nyctiophylax khaoyaiensis* MAL. & CHANTARAMONGKOL, 1993

Material: male, Loc. 1.

*Nyctiophylax zadok* MALICKY & CHANTARAMONGKOL, 1993

Material: 2 male, 2 females, Loc. 1; 4 males, Loc. 2.

*Pahamunaya akontios* MALICKY & CHANTARAMONGKOL, 1997

Material: male, Loc. 1.

Southernmost point of distribution.

*Polyplectropus alkyone* MALICKY & CHANTARAMONGKOL, 1997

Material: male, Loc. 1.

Southernmost point of distribution.

**Psychomyiidae**

*Psychomyia amphiaras* MALICKY & CHANTARAMONGKOL, 1997

Material: 11 males, 5 females, Loc. 2; male, Loc.3.

Southernmost point of distribution.

*Tinodes kuchlik* sp. n.

Material: Holotype male, Loc. 2; Paratype: male, Loc. 1.

*Tinodes ragu* MALICKY & CHANTARAMONGKOL, 1993

Material: male, Loc.1; 6 males, Loc.2.

Southernmost point of distribution.

**Ecnomidae**

*Ecnomus totiio* MALICKY & CHANTARAMONGKOL, 1993

Material: male, numerous females, Loc. 2; 3males, numerous females, Loc. 3.

*Ecnomus venimar* MALICKY & CHANTARAMONGKOL, 1993

Material: male, Loc.2; male, Loc. 3, 23.02.2007; 1 pupa (male), Loc. 3, 19.02.2007.

Southernmost point of distribution.

*Ecnomus vibenus* MALICKY & CHANTARAMONGKOL, 1993

Material: male, Loc.1; male, Loc. 3, 23.02.2007.

Southernmost point of distribution.

## Hydropsychidae

*Cheumatopsyche chrysothemis* MAL. & CHANTARAMONGKOL, 1997

Material: 11 males, 4 females, Loc. 1; 6 males, numerous females, Loc. 2.

*Hydromanicus serubabel* MALICKY & CHANTARAMONGKOL, 1993

Material: 1 male, 9 females, Loc. 1.

Southernmost point of distribution.

*Hydropsyche cacus* MALICKY & CHANTARAMONGKOL, 2000

Material: male, Loc. 1.

Southernmost point of distribution.

*Hydropsyche* sp.

Material: 13 larvae, Loc. 1; 6 larvae, Loc. 3.

*Macrostemum cf. similior* (BANKS, 1931)

Material: 2 males, 15 females, 4 pupae, Loc. 1; 5 males, Loc. 2.

If correctly identified, first record for Thailand, the northernmost point of distribution. Type revision was not possible.

*Potamyia* sp.

Material: 3 larvae, Loc. 1; 1 larva, Loc. 3.

## Lepidostomatidae

*Lepidostoma abruptum* (BANKS, 1931)

Material: 10 males, 4 females, Loc. 3, 23.02.2007

*Lepidostoma* sp.

Material: 2 larvae, Loc. 3, 19.02.2007

## Goeridae

*Goera* sp.

Material: 2 larvae, Loc. 1; 1 larva, Loc. 3, 19.02.2007.

## Helicopsychidae

*Helicopsyche nastia* sp. n.

Material: Holotype male, Loc. 1

## Leptoceridae

*Oecetis hyperion* MALICKY, 2005

Material: 2 males, 1 females, Loc. 1

First record for Thailand, the northernmost point distribution.

*Oecetis* sp.

Material: 1 pupa (female), Loc. 1

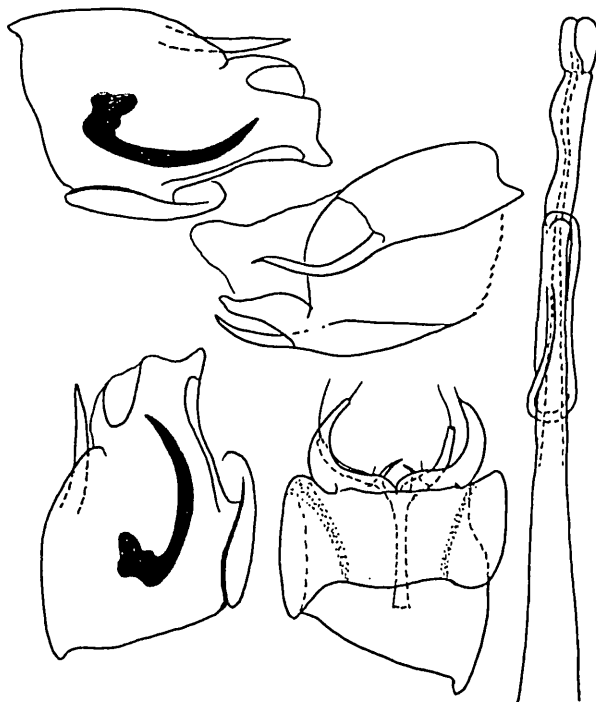
*Setodes thonetii* MALICKY & CHANTARAMONGKOL 2006

Material: 16 males, 4 females, Loc. 2

## Descriptions of new species

*Orthotrichia biokrotta* MALICKY & MELNITSKY, new species (Hydroptilidae)

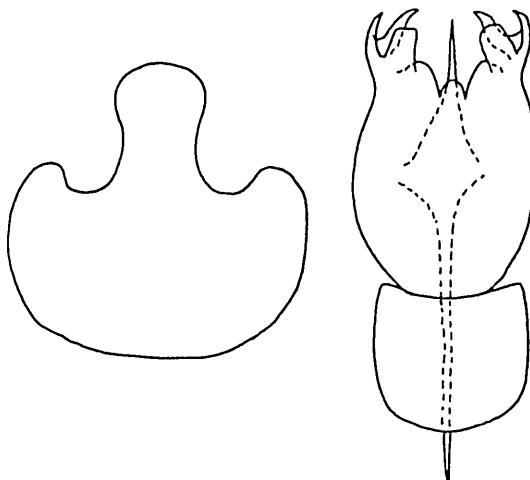
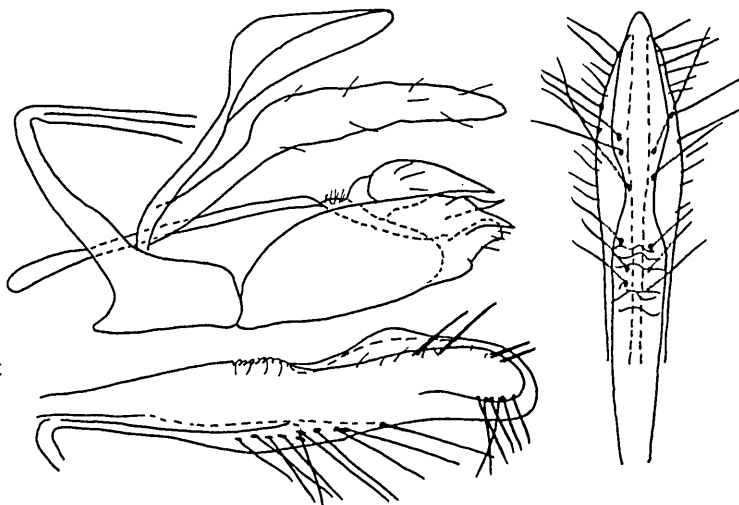
Brown, fore wing length 1,8 mm. Male genitalia highly asymmetric, as usual in the genus. A member of the *litoralis* group. The shape of the structures must be taken from the figures. The species is easily recognized by the shape of the big inner spine which is different from all other species: it is moderately long, sabre – shaped with a thickened base. This is similar to *O. thyone* MALICKY & CHANTARAMONGKOL 2007 from Thailand which corresponds in the slender form of the inferior appendages and their upper branches, but in



*O. thyone* the inner spine is straight, longer and with a smaller base.

Holotype ♂: Loc. 1; paratypes 2♂: Loc. 2.

*Tinodes kuchlik* MALICKY & MELNITSKY, new species (Psychomyiidae)



*Tinodes kuchlik*:

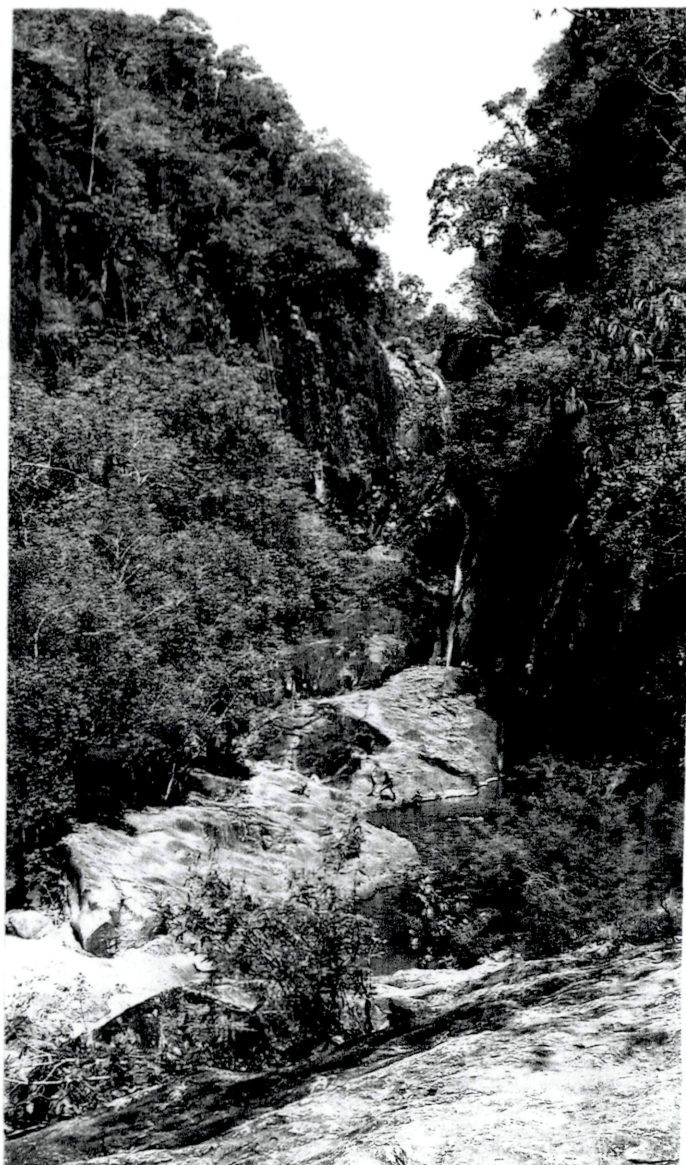
Yellowish brown, forewing length 3,5 m. Male genitalia; Sternite 9 in lateral view slender, rectangular; lateral arms starting from its anterior upper corner and somewhat extending anteriorly. Tergite 9 in dorsal view mushroom shaped. Inferior appendages oval, with two distal teeth and a short finger-like second segment; in ventral view these appendages are fused over almost their entire length. Inner basal appendage with a large, thick, and caudally directed impair spine. Upper appendages rather broad, with a slender stalk. Phallic apparatus in lateral view long and broad, with rows of large bristles along the middle of the ventral edge and in its distal part. This species is similar to *T. physetes* MALICKY 1995 from Vietnam, but the distal structures of the inferior appendages are longer in *physetes*, and there are various differences in the proportions of the structures.

Holotype ♂: Loc.2; paratype ♂: Loc.1.

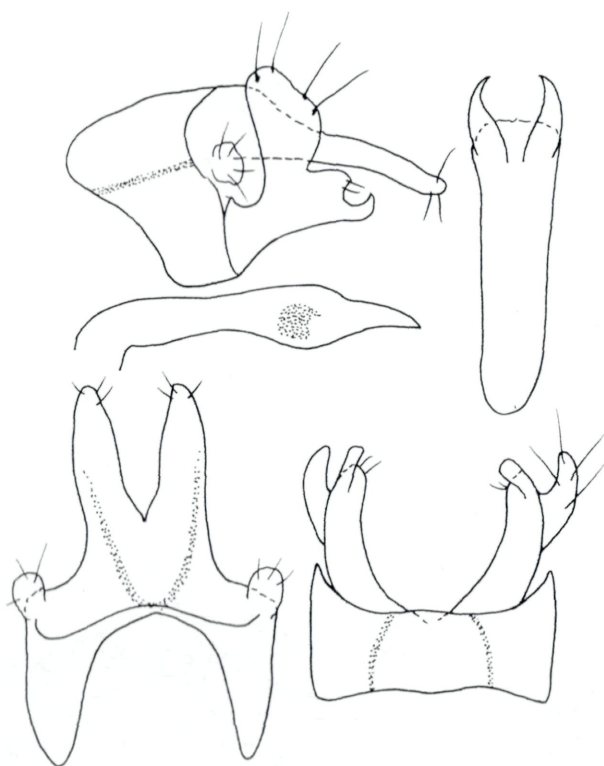
*Helicopsyche nastia* MALICKY & MELNITSKY, new species (Helicopsychidae)

Pale brownish, length of a forewing 3 mm. Maxillary palps with four segments. Male genitalia as in *H. chrysothoe* SCHMID 1993 from Kameng and Bhutan with the typical form of the inferior appendages, but the two long ends of segment 10 are in dorsal view much thinner and pointed in *chrysothoe*. The phallic apparatus has two distal spines which are slightly bent inwards, and a rounded sclerite.

Holotype ♂ and 1♂ paratype: Loc.1.



Klong Plu waterfall on Koh Chang Island (Locality 2)



## CORRECTION

## Acknowledgement

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to: *Rhyacophila cabrankensis* nov. spec.  
from Croatia  
(Braueria 34:14, 2007)

The name of the second author is correctly written:

**Ana Previšić**